Statement by

Sharon L. Caudle, Ph.D.
Younger-Carter Distinguished Policymaker in Residence and
Visiting Lecturer
The Bush School of Government and Public Service
Texas A&M University

Before the House Committee on Homeland Security, Subcommittee
on Oversight, Investigations, and Management

On
Is DHS Effectively Implementing a Strategy to Counter Emerging
Threats?

February 3, 2012

Thank you for the opportunity to appear before the Subcommittee today. My name is Dr. Sharon Caudle. I am the Younger-Carter Distinguished Policymaker in Residence and Visiting Lecturer, The Bush School of Government and Public Service, Texas A&M University. I am also a Senior Fellow at The George Washington University's Homeland Security Policy Institute. This testimony represents my personal opinions and not necessarily the opinions of the Bush School or the Homeland Security Policy Institute.

Today's hearing focuses on whether the Department of Homeland Security (DHS) is implementing an effective strategy to counter emerging threats to the security of the nation. In my statement today, I first highlight the DHS policies and overall approach for preparedness—from protection to recovery—currently in place as the result of Presidential Policy Directive-8 (PPD-8 National Preparedness). Then I focus on what I see as three challenges the Subcommittee should consider: 1) whether there should be a fundamental change in the operational approach to meeting a national preparedness goal, 2) whether implementation of capabilities by the "whole of community" from the federal government to individual citizens to address the "maximum of maximums" threats is pragmatically achievable, and 3) whether DHS should include other longer-term, emerging threats as priorities for action in its near-term strategies.

Current National Preparedness Strategies and Approach
In the five years following the issuance of President Bush's first national homeland security strategy, the Administration and Congress clarified the scope,

mission areas, and responsibilities for homeland security. National strategy objectives were consistent in four areas: 1) prevent and disrupt terrorist attacks, 2) protect the American people, critical infrastructure, and key resources, 3) respond to and recover from incidents that do occur, and 4) continue to strengthen the management foundation of homeland security to ensure long-term success.

President Obama's Administration has continued the refinement of homeland security policies and strategies, consistent with Congressional action. In February 2010, DHS released the legislatively-required *Quadrennial Homeland Security Review Report*.[1] As was the case with earlier policies, the *Report* called for a national framework of collective efforts and shared responsibilities to build and sustain critical homeland security capabilities. The grave security environment (beyond terrorism) identified in the *Report* clearly supported a broader security stance: It was expected that violent extremist groups would use terrorism to attack United States targets, social and/or political instability would continue, health threats would be more difficult to prevent, technological developments and cyber threats would pose threats, climate change would increase weather-related hazards, multiple simultaneous crises were likely, and complacency would be a danger as major crises receded from memory.

As the Subcommittee knows, President Obama released a new *National Security Strategy* that reflected the homeland security policies and concepts identified in the *Report*.[2] The *Strategy* reaffirmed the "whole of government" approach, which is the need for all levels of government, if not the entire country, to strengthen national preparedness. The Strategy retained the earlier policy notions of a homeland security enterprise (Federal, State, local, tribal, territorial, nongovernmental, and private-sector entities, as well as individuals, families and communities sharing a common national interest in American safety and security) and a culture of preparedness.

Presidential Policy Directive 8

The 2010 *Report* and the newer *National Security Strategy* set the stage for both a restatement and revitalization of the presidential direction for national preparedness. President Obama's March 2011 *Presidential Policy Directive 8 National Preparedness* (PPD-8) replaced the 2003 *Homeland Security Presidential Directive-8* (HSPD-8) issued by President Bush,[3] which had been codified by Congress. The new directive reaffirmed past policies and direction, calling for the development of 1) a national preparedness goal identifying the core capabilities necessary for preparedness and 2) a national preparedness system guiding activities enabling the nation to achieve the goal. National preparedness was defined as actions taken to plan, organize, equip, train, and exercise to build and sustain the capabilities necessary to prevent, protect against, mitigate the effects of, respond to, and recover from the threats posing the greatest risk to the nation's security.

Specifically related to the Subcommittee's interest in addressing emerging threats, PPD-8 required that a new national preparedness goal address specific threats and vulnerabilities. This overtly reduced reliance on national planning scenarios issued several years earlier as yardsticks to measure preparedness capabilities. The goal was to define the core capabilities necessary to prepare for incidents posing the greatest risk to the nation's security. This made concrete a new policy emphasis on maximum capacity for any major disaster or catastrophe.

The directive also mandated a new piece to the national preparedness system--planning frameworks for each of the five preparedness objectives—from prevention to recovery. It was envisioned that each planning framework would include a basic plan to address all-hazards. There would be roles and responsibilities at the federal level, but annexes would address unique requirements for particular threats or scenarios. The directive also required a "campaign" to build and sustain preparedness. This would integrate community-based, nonprofit, and private sector preparedness programs, research and development activities, and preparedness assistance.

The PPD-8 Implementation Documents

DHS has issued a flurry of documents in response to PPD-8's mandates. In May 2011, DHS issued the *Implementation Plan for Presidential Policy Directive 8: National Preparedness*.[4] Under the *Implementation Plan*, DHS was to perform a strategic, national-level risk assessment applicable to national, regional, and local levels. The assessment would help identify where core capabilities and associated performance objectives for the entire homeland security community should be placed, topped by the maximum preparedness capacity needed to respond to a catastrophic event.

Thus, developing "whole of community" core capabilities for catastrophes would not necessarily be restricted to specific threat and hazard scenarios described in earlier national planning scenarios. FEMA administrator Craig Fugate described the change as planning for a "meta-scenario" (or maximum of maximums) disaster. The basis for planning was a worst-case scenario involving multiple factors to plan for different hazards that challenges preparedness and overwhelms the response capabilities of every governmental level.[5] As I understand it, the scenario, a no-notice event, contemplates the impact area of at least 7 million population and 25,000 square miles, and involving several states and FEMA regions. It results in 190,000 fatalities in its initial hours, with 265,000 citizens requiring emergency medical attention. There is severe damage to critical infrastructure and key resources, including transportation. The fiscal year 2011 Regional Catastrophic Grant Program guidance uses the meta-scenario to promote preparing for a catastrophe where extraordinary levels of mass casualties, damage, and disruption overwhelm traditional and well-established response and recovery plans and procedures.

In September 2011, DHS issued the *National Preparedness Goal First Edition*.[6] The new *Goal* included detailed tables with core capabilities for prevention through recovery (called mission areas) and their preliminary targets. For example, prevention capabilities included planning, public information and warning, operational coordination, forensics and attribution, intelligence and information sharing, interdiction and disruption, and screening, search, and detection. Each capability was described; to illustrate, interdiction and disruption is to delay, divert, intercept, halt apprehend, or secure threats and/or hazards.

The document made clear that these core capabilities presented an evolution from the voluminous target capabilities list developed in response to HSPD-8. The core capability targets would be the performance thresholds for each core capability and the basis to develop performance measures to evaluate progress in meeting the targets. The description of the core capabilities and their preliminary targets were significantly streamlined from the task and capability lists issued in response to HSPD-8 and subsequently tied to federal homeland security funding. While still prescriptive, it appears the notion was that streamlining should create more room for members of the homeland security community to craft capabilities tailored to local and regional considerations, as well as the national interest.

The *Goal* stated that a strategic national risk assessment should confirm the need for an all-hazards, capability-based approach to preparedness planning. DHS' December 2011 unclassified *Strategic National Risk Assessment* grouped threats and hazards into national-level events to test the nation's preparedness.[7] These included natural, technological/accidental, and adversarial/human caused threat and hazard groups:

- Natural — Animal disease outbreak; earthquake; flood; human pandemic outbreak; hurricane; space weather; tsunami; volcanic eruption; wildfire.

- Technological or Accidental — Biological food contamination; chemical substance spill or release; dam failure; radiological substance release.

- Adversarial or Human-Caused — Aircraft as a weapon; armed assault; biological terrorism attack (non-food); chemical/biological food contamination terrorism attack; chemical terrorism attack (non-food); cyber attack against data; cyber attack against physical infrastructure; explosives terrorism attack; nuclear terrorism attack; radiological terrorism attack.

The *Goal* did not address emerging or longer-term threats or drivers of threats such as climate change identified in the *Quadrennial Homeland Security Review Report*. This was purposeful. The unclassified *Strategic National Risk Assessment* said it evaluated the risk from known threats and hazards. Those

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events, it noted, had a distinct beginning and end and were clearly linked to homeland security missions. Thus, political, economic, and environmental, and societal trends possibly contributing to a risk environment but not national events for homeland security were excluded from the assessment. Nevertheless, the document said non-national-level threats, such as droughts and heat waves, could pose risks to jurisdictions and should be considered in preparedness planning.

In November 2011, DHS released a brief description of a new *National Preparedness System.*[8] Its components included 1) identifying and assessing risk, 2) estimating capability requirements, 3) building and sustaining capabilities, 4) planning to deliver capabilities, 5) validating capabilities, and 6) reviewing and updating. To identify and assess risk, the *System* document stated that the *Strategic National Risk Assessment* would analyze the greatest risks to the nation. The Threat and Hazard Identification and Risk Assessment guidance under development at that time would provide a common, consistent approach to identify and assess risks and associated impacts.

Measuring progress toward achieving the *National Preparedness Goal* could be done through tools such as exercises, remedial action management programs, and assessments. The National Exercise Program was deemed the principal mechanism to measure readiness, supplemented by exercises done by individual organizations. Training and performance during actual events would test and validate achievement of desired capabilities. Ongoing sharing of lessons learned and monitoring would also occur through a remedial action management program and a comprehensive assessment system of the whole community. A National Preparedness Report is due in November 2012.

Major Themes in National Preparedness Expectations
Up to this point, I have briefly described the current national preparedness policy, strategy, and guidance. It has highlighted a number of major themes:

- Homeland security placed within national security.
- All-hazards as the centerpiece for preparedness for threats, including terrorism.
- Preparedness defined with the full coverage of objectives: prevention, protection, mitigation, response, and recovery, with response and recovery no longer the centerpieces of preparedness.
- The whole homeland security community in addition to the federal government with the responsibility to protect national interests and way of life.
- Maximum capacity for a catastrophic event (a meta-scenario) as the benchmark for preparedness.
- Known threats and hazards with a distinct beginning and end central to homeland security risk management and preparedness.
- Core capabilities and targets for a national effort update past prescriptive, detailed individual tasks and target capabilities.

- A homeland security management system to accomplish homeland security and crafted with specific components, performance expectations, and assessment and adjustment requirements.
- Assessment of preparedness progress primarily through exercises and actual events.

Challenges in Strategy and Implementation

Now, I will turn to the challenges I see in the overall preparedness strategy and its implementation to counter emerging threats that the Subcommittee should consider. The first: should there be a fundamental change in the operational approach to meeting a national preparedness goal? The second: is implementation of the "whole of community" for the "maximum of maximums" pragmatically achievable? The third: what other emerging threats should DHS set as priorities for action?

Alternative to the Current Capabilities Development Approach

The current and earlier *National Preparedness Goal* and their supporting documents, as well as federal legislation, have identified the need to build and sustain specific preparedness capabilities for the entire homeland security community. Federal, state, and local governments, nongovernmental organizations, private organizations, and the general public are that community. National preparedness comes from capabilities across this whole community.

DHS in large part adopted the capabilities approach from the Department of Defense where it was used by the defense community in many countries.[9] HSPD-8 required a national preparedness goal to define measurable readiness (preparedness) priorities and targets, but also with a caveat about the resource investments. PPD-8 called for actions to achieve a preparedness approach to optimize the use of available resources.

Developing capabilities may have been the optimal route at that time towards achieving preparedness, but whether other alternatives that were better investments were considered was not made explicit—if, in fact, they were even considered. In the interim, as the Subcommittee knows, DHS has provided billions in preparedness grants intended to aid states, urban areas, tribal governments, and nonprofit organizations, supposedly to strengthen their capabilities to meet threats associated with potential terrorist attacks and other hazards. Over time, the Department has attempted to link dollars spent with the development of capabilities.[10]

Assessing preparedness based on national preparedness capabilities remains very elusive. Summing the difficulties, the U.S. Government Accountability Office (GAO)[11] found that evaluation efforts that collected data on national preparedness capabilities faced limitations such as data reliability and the lack of standardized data collection. According to GAO, FEMA had problems in completing a comprehensive assessment system and developing national preparedness capability requirements based on established metrics. GAO[12]

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continues to cite these operational and implementation weaknesses, even though the assessment of capabilities and evaluation of preparedness is a legislative requirement. In addition, the GAO[13] specifically found problems with at least one tool mentioned by the new *National Preparedness Goal* as central to measuring progress—the National Exercise Program. FEMA's implementation of the national program has consistently run into problems, such as ensuring if federal and state governments had addressed deficiencies identified by the exercises. In March 2011, FEMA developed a new National Exercise Program Base Plan that extensively revised the program, with major changes in requirements and leadership.[14] The verdict is still out whether the past history of the Department of Homeland Security in failing to adequately measure progress will be reversed.

Thus still left unanswered is the most significant question: What preparedness did the billions of dollars buy? With federal funding constraints and similar challenges for other levels of government and other members of the homeland security community for the foreseeable future, this is an opportune time to consider if other policy options might be more cost effective, or, at a minimum, justify the current policy of capabilities development and sustainability.

The capabilities approach is not etched in stone. There is at least one policy option the Subcommittee might consider to contrast with the capabilities approach. This option is already grounded in Congressional legislation and administration policies: simply, it is the application of national and/or international management system preparedness standards applicable to all organizations, which I have advocated in the past.[15]

There are two national voluntary programs where management system preparedness standards, not elusive core capabilities, are used as the benchmark for preparedness requirements. Legislation implementing many of the 9/11 Commission's recommendations (Section 524 of the August 2007 P.L. 110-53) called for DHS to create a voluntary private sector preparedness program with standards, including accreditation and certification processes. In June 2010, DHS produced the Private Sector Preparedness Accreditation and Certification Program (PS-Prep). Three management system standards were approved for adoption in the program: ASIS SPC.1-2009 *Organizational Resilience: Security Preparedness, and Continuity Management System*; British Standard 25999-2:2007 *Business Continuity Management*; and National Fire Protection Association 1600: 2007/2010 *Standard on Disaster/ Emergency Management and Business Continuity Programs*. At the end of September 2010, DHS announced a certification program tailored to the needs of small business.

The other national effort using management system standards is the current Emergency Management Accreditation Program (EMAP), a voluntary review process for state and local emergency management programs. EMAP certifies government programs against standards directly based on NFPA 1600. State

and local entities can use federal homeland security grant funding to pay for EMAP activities. Interestingly, at one time, FEMA used the EMAP standards to administer its National Emergency Baseline Capability Assurance Program. If there truly is to be a "whole of community" effort, it would seem to be a necessary condition to have a compatible approach for all the entities involved.

Still to be resolved would be whether adoption of the management system preparedness standards should be mandated, perhaps tied to federal funding or regulations, and how certification or accreditation against the standards would be conducted. Normally, management system standards such as those under the PS-Prep program or EMAP are voluntary, although compliance with such standards may be seen as part of a legal standard of care across an industry.

Government agencies such as DHS could implicitly mandate standards by using them as guidelines for complying with regulatory requirements. Or the agencies may forego a mandatory regulation if they view voluntary compliance as meeting policy goals. This seems to be the legislative and executive branch approach taken with the PS-Prep voluntary standards for the private sector. There are established provisions that can be invoked for mandatory adoption as part of national regulatory frameworks or legislation. The National Technology Transfer and Advancement Act of 1995 and resulting Office of Management and Budget (OMB) Circular A-119 (revised in 1998) mandated federal agencies use management system standards developed by either domestic or international standards bodies instead of federal government-unique standards (e.g., the *National Preparedness Goal*) in their regulatory or procurement activities.

Implementing Whole of Community for the Maximum of Maximums

A second challenge is realistically implementing a "whole of community" effort in anticipation of a "maximum of maximums" effort, at least within 72 hours of a catastrophic incident. In June 2011 testimony, FEMA Administrator Fugate[16] stated that emergency management historically planned for scenarios to which government could respond and recover from. Instead, he testified that modern disaster planning should be for a "meta-scenario" (or "maximum of maximums" event) destined to overwhelm all levels of government. Such worst-case planning would require the efforts of a "whole community" approach intended to leverage the expertise and resources of governmental and non-governmental stakeholders—the entire emergency management community from the federal government to individuals, families, and communities.

The definition of "whole of community is the same as "all-of-Nation" in the new *National Preparedness Goal:* "a focus on enabling the participation in national preparedness activities of a wider range of players from the private and nonprofit sectors, including nongovernmental organizations and the general public, in conjunction with the participation of Federal, state, and local governmental partners to foster better coordination and working relationships."

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As the Subcommittee knows, the emphasis on shared responsibility and coordination is not new. President George W. Bush's June 2002 proposal to create DHS expressed hope that the agency would make state, local, and private sector coordination one of its "key components."[17] The first *National Strategy for Homeland Security* viewed homeland security as a concerted national effort. The approach was based on shared responsibility and partnership involving the Congress, state and local governments, the private sector, and the American people in a concerted national effort to prevent attacks.[18]

Is the "whole of community" approach rooted in a mega-disaster scenario realistic or, more particularly, cost-effective? One visualizes all homeland security actors anticipating a catastrophe such as Hurricane Katrina, a nuclear event, or a worldwide pandemic, that will overwhelm all local and regional partners for a good length of time. It is not clear to me how the federal government will actually strategically and operationally determine "whole of community" preparedness for a mega-disaster going forward.

PPD-8 calls for planning frameworks with basic plans for all hazards—presumably a maximum of maximum effort, plus specific threat or scenario annexes. The Implementation details to date do not provide the information on how members of the "whole community" should interact to achieve these capability targets and what scarce resources practically can be invested. It is expected that those details will await the finalization of the National Preparedness System and the publication of all National Planning Frameworks, also required by PPD-8. The National Preparedness System will "guide domestic efforts of all levels of government, the private and nonprofit sectors and the public."[19]

In sum, the focus on "whole of community" may well be noteworthy, but its implementation calls for complexity of coordinated action, assessment, and funding that may be overwhelming and marked by imprecision. A return to "whole of government" may be more realistic, simply because of the ties to federal funding. Despite the uncertainty of government funding, it is reasonable to assume that preparedness will retain its importance, although not perhaps to the hoped levels of national capabilities for a meta-scenario.

Emerging Threat Priorities

A third major challenge I see that the Subcommittee might consider in the DHS strategy is addressing threats that are longer-term in their emergence as a direct threat to national security. Among other things, the September 2010 Local, State, Tribal, and Federal Preparedness Task Force[20] report to Congress called for 1) improving the ability to strategically forecast emerging preparedness requirements and associated policies and/or capabilities and 2) develop a strategic policy planning process that prepares for future challenges by performing long-range assessments. The Task Force said that the complexity of the envisioned homeland security and emergency management enterprise, especially in terms of non-governmental roles, means that desired preparedness

outcomes often may take years to achieve. In their view, a range of dynamic issues—such as the environment, demographics, economics, and health trends—are likely to play increasingly important roles. Preparedness policies, therefore, should be anticipatory, not reactionary, enabling anticipatory investments in key areas.

As I mentioned earlier, the hazards listed in the *National Preparedness Goal* reference well-known, specific event hazards and attacks determined by the current *Strategic National Risk Assessment*. However, the current *National Security Strategy* and *Quadrennial Homeland Security Review Report* explicitly define a strategic threat environment and global trends that appear to have national preparedness implications, although they are not described as imminent. These include the gradual emergencies and disasters that result from dependence upon fossil fuels, global climate change, fragile and failing states, and global illicit trafficking and related transnational crime, and economic and financial instability.

In a 2009 article on national security strategies,[21] I discussed drivers of changes in security on a national and global scale, such as pandemics, population changes, and economic stress. These drivers translate into threats to security, whether individually or collectively, which countries have incorporated into their strategies. In other countries, the security environment includes these longer-term threats. In general, their national security strategies (including those covering homeland security or domestic security) incorporate them into the strategies and follow-on policy and operational requirements and guidance. For example, climate change or environmental change pose dangers that may occur on a national or global scale, such as more frequent heat waves, droughts, flooding, reduced crop yields, and wildfires.[22] The *Goal* and supporting documents target building and sustaining capabilities narrowly for the near term threat of a meta-scenario. It is not clear how these capabilities will prepare the country for the challenges of the longer-term threats.

There have been a multitude of studies on these drivers or changes with recommendations for immediate action. The Organisation for Economic Co-Operation and Development (OECD) presented an analysis of "global shocks" – cascading risks that become active threats as they spread across global systems.[23] These included pandemics, financial crises, critical infrastructure disruption, and cyber risks, geomagnetic storms, and social unrest. As the OECD study pointed out, surveillance is central to risk assessment and management. In addition, security agencies, working with regulatory agencies, should use, adapt, and implement risk-assessment tools to design more resilient national and international systems. Emergency management of future global shocks, OECD said, called for policy options such as 1) surveillance and early warning systems, 2) strategic reserves and stockpiles of critical resources, 3) addressing where countermeasures to systemic threats have been weak, and 4) monitoring of future developments that could pose potential risks. OECD cited challenges such

as insufficient skills and knowledge to manage global shocks and obstacles to international cooperation and coordination.

DHS certainly understands the need for action anticipating these global shocks. FEMA's Strategic Foresight Initiative, initiated in 2010, emphasizes the importance of understanding and addressing the drivers of future change.[24] FEMA urges the emergency management community to establish a foresight capability—identifying key future issues, trends, and other factors with an eye to executing an agenda for action over the next 20 years. Not surprisingly, FEMA identifies well-known drivers -- universal access to and use of information, technological innovation and dependency, shifting U.S. demographics, climate change, global interdependencies and globalization, government budget constraints, critical infrastructure deterioration, and the evolving terrorist threat. The FEMA study says that through the foresight process, over the next few decades very rapid change and complexity will define the emergency management environment. FEMA says that even slow-moving and predictable trends such as demographic changes could be radically changed because of drivers such as climate change or pandemics.

FEMA sees a number of emergency management capabilities as needed as part of strategic foresight that could be included in preparedness efforts (pp. 13-20). For example, these include addressing dynamic and unprecedented shifts in local and regional population characteristics and migratory flows; anticipating emerging challenges and develop appropriate plans and contingencies; employing alternative surge models to meet the challenging confluences of social, technological, environmental, economic, and political factors and conditions; and remediating hidden vulnerabilities in critical supplies from water to energy to medical products to offset threats to the full scope of emergency management activities.

Throughout these three challenges, I urge the Subcommittee to consider if the current DHS strategies overweigh the opportunity costs in continuing to pursue a comprehensive capabilities approach, insisting on the whole of community being prepared for a maximum of maximum event, and delaying action on confronting longer-term threats.

This concludes my statement. I appreciate the opportunity to appear before the Subcommittee today and look forward to any questions you may have.

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